DEPARTMENT OF THE NAVY
NORTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
10 INDUSTRIAL HIGHWAY
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IN REPLY REFER TO
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MEMORANDUM

FOR THE MEMBERS OF THE TECHNICAL REVIEW COMMITTEE (TRC) FOR THE INSTALLATION RESTORATION PROGRAM AT NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP) CALVERTON, NEW YORK

I am pleased to submit a copy to your office of the U.S. Navy's Final RCRA Facility Assessment (RFA) for Sites 8, 9, 10, and 11 at NWIRP Calverton, NY. This Final Report has incorporated all appropriate comments from the TRC which were forwarded to this office during the comment period.

Also attached are the Navy's written responses to your individual comments. If you would like to discuss any issues regarding this report, or the Calverton IR program in general, please give me a call at (610) 595-0567, extension 163.

Thank you for your continued participation in NWIRP Calverton's IR program.

Sincerely,

James L. Colter

JAMES L. COLTER
Remedial Project Manager
by direction of the Commanding Officer

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COMMENTS ON THE DRAFT RCRA FACILITY ASSESSMENT (RFA) FOR NAVAL WEAPONS INDUSTRIAL RESERVE PLANT CALVERTON, NEW YORK

U. S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

COAL STORAGE PILE AREA

1 Comment: Sediments - We accept that the concentrations of toluene in Sample Number CP-SD03-.33.66, does not appear to adversely impact human health. This is because the toluene concentration (63 ppb) is several orders of magnitude lower than the 20,000,000 ppb health-based limitations for this contaminant, as stated in the NYS TAGM Number 4046. However, as this sample was taken in a wetland area, please indicate whether or not a concentration was identified as the upper limit which would not adversely impact the wetland ecosystem.

Response: The following foot note will be added to Table 2-4. "A Federal and state sediment standard for toluene is not available. However, based on sediment/surface water partitioning and water-based standards for protection of aquatic life, a calculated toluene sediment criteria is 510 ug/kg."

ELECTRONIC COUNTER MEASURES (ECM) AREA

2 Comment Cadmium concentrations exceeded the Federal Maximum Contaminant Level (MCL) in duplicate sample ECM-GW0739-DU. This sample had a cadmium reading of 9.0 ug/l whereas the federal MCL is 5 ug/l. As ECM-GW0739 and ECM-GW0739-DU were the only groundwater samples that were analyzed for metals, and no soil samples were analyzed for metals, we recommend that additional sampling be done to determine whether cadmium is present in the soil and/or groundwater. This is especially important because of the potential for human exposure in the future use scenario. We recommend that the well at ECM-GW0739 be resampled for metals, and that one or more soil borings be taken in the vicinity of this well and sampled for metals. If the readings are found to be positive, additional sampling may be requested

Response: The Navy agrees that cadmium may be a potential concern at the site, especially considering the results of the cesspool sampling conducted by Suffolk County (SC), (results presented on page 3-16). This testing found cadmium and several other metals in the cesspool wastes.

Because this facility is now targeted for closure, an Environmental Baseline Survey (EBS) is being conducted In addition, during the clean out and closure of the cesspools, soils surrounding the cesspool should be tested for contamination

Also, during future activities at the facility, this well will be sampled to determine whether cadmium is actually present in the groundwater. Please note that the cadmium result presented is presented with a "J", indicating that the concentration is estimated. In addition, cadmium was not detected in the original sample (less than 5 ug/l). As a result, the cadmium result referenced should be used with caution

Conclusion/Recommendation 3 will be replaced as follows (note see SC Comment 10).

3 Three temporary monitoring wells will be installed inside the NWIRP fence, northeast of the ECM area to confirm the above conclusions. These wells will be sampled for VOCs.

4. During cesspool closure, surrounding soils would need to be evaluated for inorganic contamination.

3. Comment: On Page 3-13 of The Sampling Visit Report, it is stated that the inorganic contaminants found in the onsite groundwater monitoring well naturally are present in the groundwater at concentrations which are approximately equal to the reported amounts. Background data would need to be provided to verify that the concentrations of metals, especially cadmium, found in the monitoring well are of similar concentrations to background levels.

Response: The referenced statement will be deleted from the report.

4 Comment: On page 3-13, there is an error in the name of the onsite groundwater monitoring well. It should be ECM-GW0739.

Response: This typo will be corrected as indicated.

COUNTY OF SUFFOLK:

SAMPLING PROCEDURE

1 Comment: Groundwater samples were not taken from the soil borings at the water table, as I was lead to believe would be collected (see comments dated 11/18/92 on work plan).

Response: Samples of the groundwater were collected as indicated in the work plan. The soil samples selected for testing included a sample taken at the water table. This sample would include a mixture of soils and groundwater at a relative ratio of approximately 70 to 30 (30% moisture). As discussed during the tele-conference, these results can be used as an indication of groundwater contamination.

HYDROGEOLOGY

2. Comment: The locations of glacial till on the site should be discussed (pg 1-8).

Response: The discussion on page 1-8 is intended to address the regional geology. Site-specific geology observations are presented under the geology section for each site. Note that the extent of the geological investigation and discussion is typically very limited in an RFA. More detail is usually provided in an RFI.

3 Comment: The Calverton NWIRP is located on the regional groundwater divide; surface topography should not affect local directions of flow at the site (pg 1-11).

Response: Agreed The statement "Assuming that the configuration... is generally to the south." will be deleted.

SITE 8 COAL PILE STORAGE AREA

4. Comment: The assumed direction of groundwater flow should be mentioned in conjunction with the statement that the production wells are downgradient of the wetlands (pg 2-6).

Response: The wording will be modified as follows. "Chlorinated chemicals have been detected in the sediments and Production Wells, which likely include recharge from the area of the sediments."

5. Comment: Contamination from this site has already impacted human health, i.e., contaminated drinking water supply wells, which continue to require treatment (pg ES-4); therefore, given the high OVA reading, solvent-type odor, and finding of freon 113 in SB10 (pp 2-10 to 2-12), it is recommended that VOCs be included in the proposed groundwater contamination investigation in the area (pg 2-20).

Response: Agreed. Future testing in the area will include VOC analysis. Recommendation 2 will be modified to add "(including VOC testing) after "groundwater investigation".

Conclusion 1 will be modified to state that the coal, sediment, and soils from this site would not be expected to be a "current or future" risk to human health or the environment. The following statement will also be added to Conclusion 1. "In addition, the coal pile does not appear to be a continuing source of contamination."

Please note that the Navy does not agree that human health has been impacted by the operation of these wells. Workers are not being exposed to contaminated groundwater.

Also note that freon 113 was detected only in waste sample WS01. Freon 11, not freon 113, was detected in Soil Boring 10.

SITE 9 ECM AREA

6 Comment: The history of solvent use at the site needs to be expanded (pp 1-13 & 3-5), including years of use, rates of consumption, storage practices, and waste disposal practices (including info sources).

Response: The information presented is based on interviews with workers at the site. Additional details are not available. The text under evidence of release on pages 3-4 and 3-5 will be modified to indicate the source of information presented: "Based on interviews with workers". There are no acknowledged waste disposal practices at the site.

7 Comment: The OMNI site is experimenting with municipal solid waste (MSW) compost, not sewage sludge (pp ES-5, 1-13 & 3-1).

Response: The text will be changed to indicate the municipal solid waste compost was used at the site, not sewage sludge.

8 Comment: References to the farthest and nearest SCDHS monitoring wells are misleading, since the wells are not lined up in the ENE direction of groundwater flow; such references, therefore, should be deleted (pp ES-5 & 1-13).

Response: The references will be deleted as indicated.

9 Comment: The discussion about other potential sources of contamination should be deleted (pg 3-5); TCA was found in SCDHS test wells before the compost was applied, irrigation was started, and drums were stored.

Response: The discussion will be deleted as indicated.

10 Comment: Soil boring ECM-SB03 does not appear to have been moved to line up between the former solvent storage location and SCDHS MW-7 (pp 3-2 & 3-8), as requested in my letter of 11/18/92;the negative result from SB03, therefore, are inconclusive (pp ES-6 & 3-18).

Response: The Navy agrees. The soil boring was supposed to have been placed as directly in line as feasible in the field. However, based on a recent field and survey data review of the soil boring location (03/15/95), this soil boring was actually placed much further south than shown on the draft figures and almost due east of the ECM area. As a result, conclusions derived from sample results from this soil boring will be deleted from the text. Rather than installing this soil boring in the proper location, the Navy has decided to install three temporary monitoring wells northeast of the ECM area. These wells should provide a more definitive conclusion regarding the source of the offsite contamination noted. Recommendation 3 will be revised as follows.

3. Three temporary monitoring wells will be installed inside the NWIRP fence, northeast of the ECM area to confirm the above conclusions. These wells will be sampled for VOCs.

Note that soil borings SB01 and SB02 were placed at the suspected potential source areas, namely the cesspool and drum storage location. Therefore, conclusions regarding the site will not be changed at this time.

11 Comment: The results from SB02 need further explanation (pg 3-11), particularly the cause of staining at 20-22 feet, which is unlikely to have been caused by methane; a groundwater sample should have been taken from this boring at the water table (see comment above).

Response: The presence of the observed staining cannot be explained. However, because target analytes and non-target analytes (TICs) were not detected at this location, the staining is not likely to be an indication of contamination. The methane hypothesis was presented as a possible explanation of elevated OVA readings.

A groundwater sample was collected at this location (ECM-SB02-3436). As discussed above, this sample represents a combination of soil and groundwater. Target and non-target analytes were not detected in this sample.

12 Comment: The exact location of the cesspool "adjacent" to SB02 should be shown (presumably it is not the one on the west side of the building), and a description of efforts to sample this pool, if any, should be described

Response The referenced cesspool is shown of Figure 3-2 and is approximately 100 feet west of the soil boring location The term "adjacent" will be replaced by "nearby"

13 Comment: It is suggested that a soil vapor survey be considered for this site.

Response: A soil gas program will be considered as a possible future action at the site However, a temporary monitoring well program, which should be more conclusive, is currently recommended.

SITE 10 CESSPOOLS/LEACH FIELD AREAS

14 Comment: It is unfortunate that the old, abandoned leach field for the STP located near the south gate was not investigated, as requested in my letter of 11/18/95, since the SCDHS monitoring well located downgradient of this area outside the fence line (S-51591) continues to show VOC contamination (TCA at 63 ppb & 1,1-DCA at 64 ppb on 8/1/94).

Response: As discussed during our tele-conference on March 9, 1995, this leach field was tested extensively.

15. Comment: The source of the cyanide contamination at Building 06-13 needs to be identified.

Response: The source of the cyanide at Building 06-13 will be considered during the upcoming Environmental Baseline Survey.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1 Comment: P. 1-13, ¶ 2, should read "...the findings of solvents in the adjacent production wells."

Response: The text will be modified as indicated.

2 Comment: Figure 2-2. All figures showing concentration should identify in the legend that results shown are in parts per billion (ppb).

Response: Units will be added to each figure.

3 Comment: Table 2-2. The NYS TAGM value for toluene under the heading "Protection of Human Health" is 20,000,000 ppb.

Response: This typo will be corrected.

4 Comment: P 2-15, ¶ 3, second line There is no NYS Technical and Guidance Memorandum (TAGM) for sediment cleanup values. The document referred to is a guidance document issued by the Division of Fish and Wildlife.

Response: The document reference will be revised to New York State Technical Guidance (NYSDEC Division of Fish and Wildlife).

4 Comment: P. 3-13, ¶ 5, fourth line. The referred document pertaining to State groundwater standards (NYCRR) Title 6 Part 703 was amended in October 1993. Enclosed is a copy of the amended standard. This document should also be listed in the references section of the report.

Response: This document will be indicated as referenced.

5 Comment. P. 3-16, ¶ 2, Cesspool Wastes-Electronics Countermeasure Area The Department is requesting that the cesspools' wastewater and sludge identified in the report be pumped out and

properly disposed. This is in consideration that this area is not utilized and waste should not be left in place to become a potential source of contamination.

Response: The materials in the cesspools/leachfields will be cleaned out during the closure of the facility. An Environmental Baseline Survey is currently being conducted to identify these needs.

Grumman

Grumman provided a marked up copy of the RFA report. These markups will be incorporated as indicated.